

I claim:

Sub 17  
1. A device for removing portions of the outer layers of skin comprising:  
a source of a vacuum, and  
a tube with an abrasive treatment tip thereon, the tube being attached to the source of  
5 vacuum so that a lumen through the tube has a reduced pressure therein which is less  
than the ambient pressure surrounding the tube, the abrasive tip having at least one  
opening therein for applying the reduced pressure within the tube to a skin surface.

2. The device of claim 1 wherein the source of vacuum is a  
vacuum pump enclosed within a housing, the housing have means thereon for  
10 monitoring and controlling the level of vacuum delivered.

3. The device of claim 1 further including means for varying the level of  
reduced pressure applied through the treatment tip.

4. The device of claim 3 wherein the means for varying the level of  
reduced pressure applied through the treatment tip is a valve mechanism mounted in  
15 the treatment tube.

5. The device of claim 3 wherein the means for varying the level of  
reduced pressure applied through the treatment tip is a valve mechanism in operative  
connection to the source of vacuum.

Sub 27  
20 6. The device of claim 1 wherein the abrasive tip has diamond particles  
attached thereto.

7. The device of claim 1 wherein the abrasive tip has a mechanically or  
chemically created roughened surface.

Sub 31  
25 8. A tubular device for performing micro-abrasion of a skin surface  
comprising a tubular device with a lumen there through, the tubular device having a  
first end with an abrasive surface and means on a second end thereof for attachment to  
a source of a vacuum.

10 9. The tubular device of claim 8 wherein the abrasive surface on the first  
end comprises crystalline diamond pieces permanently secured to said first end.

11 10. The tubular device of claim 8 wherein the abrasive surface on the first  
30 end comprises crystalline aluminum oxide pieces permanently secured to said first  
end.